## APPENDIX 5 GRAZING TREATMENTS

Fifteen grazing treatments (A through O) are proposed. Map 2-2 shows use areas within the allotment. Table 4-3 describes the phenology of key forage species in each use area of the allotment.

Treatment A: Graze from May 1 or May 15 until seed ripe of key species (July 15 or August 1), then rest until winter grazing. Cattle movement would be controlled by topography, placement and operation of water developments, partial use area or riparian pasture fences, prescribed placement of salt and mineral supplement, and herding. Sheep movement would be controlled by herding. Sheep bands would be required to be moved at least every seven days a minimum of 1.5 miles in the Happy Springs and Alkali Creek Sheep Use Areas, the Alkali Creek and Granite Creek-Rocks Pastures of the Antelope Hills-Picket Lake Use Area, and the East Alkali Creek and Bare Ring Butte Pastures of the Arapahoe Use Area, and moved three miles in the Daley Lake and Picket Lake Pastures of the Antelope Hills-Picket Lake Use Area and the Eagles Nest Draw and Lost Creek Pastures of the Arapahoe Use Area. The minimum distance is determined by computing the radius of an area of a given grazing capacity that would be properly grazed in seven days by a band of sheep. The minimum distance the band must be moved is twice that radius, assuring that the same area would not receive continuous use.

<u>Treatment B:</u> Rest until seed ripe of key species (July 15 through August 1), then graze to trample seed into soil until October 1 or 31. This treatment would defer grazing in a pasture until the important key forage species have produced mature seeds.

<u>Treatment C:</u> Graze season-long through the spring (April 1 or May 1 through June 15). This treatment would be used with sheep, which would be moved as described in treatment A.

<u>Treatment D:</u> Graze season-long through the summer (July 16 through September 15). This treatment would be used by both sheep and cattle in the Crooks Mountain Pasture and by cattle only in the Green Mountain and Willow Creek Pastures.

<u>Treatment E:</u> Graze season-long through the late summer/early fall (August 1 or 15 through September 30). This treatment would be used with cattle and sheep. The sheep would be moved as described in treatment A.

<u>Treatment F:</u> Graze November 1 through December 31. This fall season treatment would be used with cattle and sheep. The sheep would be moved as described in treatment A.

<u>Treatment G:</u> Rest summer-long (June 16 through September 15). Under this treatment, the Alkali Creek Sheep and Long Slough Use Areas/Pastures would not be grazed by sheep or cattle during the hot season for riparian area improvement.

<u>Treatment H:</u> Graze during the period of January 1 through February 28 or March 31. This winter season treatment would be used with cattle and sheep. The sheep would be moved and controlled as described in treatment A.

<u>Treatment I:</u> Graze season-long through the spring (May 1 or May 15 through June 15). This treatment would be used with cattle in the Long Slough Use Area/Pasture and the Stratton Rim Pasture within the Green Mountain Use Area during the grazing year. The season of use would not exceed 31 days in the riparian pastures. Riparian pastures would be managed to maintain a minimum of a six-inch stubble height on herbaceous vegetation in the fall.

<u>Treatment J:</u> Graze September 16 or October 1 through October 31 or November 15. This fall season treatment would be used by cattle in the Long Slough Use Area/Pasture and the other riparian pastures without willow plant communities. This fall season treatment would also be used by cattle and sheep in the upland pastures of the Arapahoe, Happy Springs, Antelope Hills-Picket Lake, and Green Mountain Use Areas during the grazing year. The season of use would not exceed 31 days in the riparian pastures. Riparian pastures would be managed to maintain a minimum of a six-inch stubble height on herbaceous vegetation after the fall grazing season.

<u>Treatment K:</u> Graze season-long after range readiness date of June 1 for lower elevation pastures (similar to treatment A except for later turnout date.)

<u>Treatment L:</u> Graze key upland sites at a proper use level of 30-40 percent. This is the proper use on key upland species during the critical growth period of May 1-July 15. A use level of 50 percent on key upland species is proper after the critical growth period (Holechek 1988, Clary 1989).

<u>Treatment M:</u> Graze key riparian sites at a proper use level of 50 percent on meadow riparian areas in the Antelope Hills-Picket Lake Use Area. This is the proper use level when grazing use occurs early in the summer and there is the opportunity for regrowth prior to fall dormancy. A use level of 30-40 percent is proper in those years when the grazing period runs to September 1 and there is little opportunity for regrowth to occur after grazing use. A stubble height of four-inch or more would be maintained on key riparian sites within the Alkali Creek and Granite Creek-Rocks Pastures of the Antelope Hills-Picket Lake Use Area after planned grazing use (Clary 1989, Clary 1990, Myers 1989).

<u>Treatment N:</u> Graze key riparian sites at a proper use level of 50 percent on meadow riparian areas in the Green Mountain, Happy Springs, and Arapahoe Use Areas. This is the proper use level when grazing use occurs early in the summer and there is the opportunity for regrowth prior to fall dormancy. A use level of 30-40 percent is proper in those years when the grazing period runs to September 1-15 and there is little opportunity for regrowth to occur after grazing use. A stubble height of three to four inches would be maintained on key riparian sites within these use areas after planned grazing use (Clary 1989, Clary 1990, Myers 1989).

<u>Treatment O:</u> Rest yearlong for one to three years to initiate the recovery process on degraded riparian areas within the Ice Slough, Long Slough, Warm Springs Creek, Sweetwater River, and West Fork Crooks Creek Riparian Management Pastures.

<u>Treatment P:</u> Rest yearlong (for one year) to allow plants to make and store carbohydrates; provide for root growth and recover vigor; allow for seedling establishment; and litter accumulation between plants.

<u>Treatment Q:</u> Graze early for livestock production -Graze season long through late spring (May 1 through June 4 = 35 days). This treatment would be used with cattle and sheep in Alternative Number Four within the proposed Alkali Creek Common Allotment.

<u>Treatment R:</u> Defer for improved plant vigor -Graze season long through early summer (June 5 through July 9 = 35 days). This treatment would be used with cattle and sheep in Alternative Number Four within the proposed Alkali Creek Common Allotment.

<u>Treatment S:</u> Defer for improved plant vigor, seed production and trampling - Graze season long through mid-summer (July 10 through August 13 = 35 days). This treatment would be used with cattle and sheep in Alternative Number Four within the proposed Alkali Creek Common Allotment. The season of use would not exceed 35 days. Riparian areas would be managed to maintain a minimum of a six-inch stubble height on herbaceous vegetation within key areas. Riparian areas with willows would be managed for 35-45 percent use on current year's leader growth within designated key areas. Upland vegetation utilization would be managed for 35-45 percent use on herbaceous key species within designated key areas.

<u>Treatment T:</u> Defer for improved plant vigor, seed production and trampling and litter accumulation between plants - Graze season long through the late summer (August14 through September 17 = 35 days). This treatment would be used with cattle and sheep in Alternative Number Four within the proposed Alkali Creek Common Allotment. The season of use would not exceed 35 days. Riparian areas would be managed to maintain a minimum of a six-inch stubble height on herbaceous vegetation within key areas. Riparian areas with willows would be managed for 35-45 percent use on current year's leader growth within designated key areas. Upland vegetation utilization would be managed for 35-45 percent use on herbaceous key species within designated key areas.